## Improving Depression Screening and Management in Primary Care by Utilizing an Evidence-based Protocol



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"This project is in partial fulfillment of the degree requirements for the Doctor of Nursing Practice at Touro University Nevada."

## **Introduction to Depression**



- u Suicide is the tenth leading cause of death in the United States (Park & Zarate, 2019).
- u The lifetime risk of a major depressive episode is approximately 30% (Que et al., 2020).
- u Primary care providers play a critical role in preventing suicide.
- u 20% of clinic site patients were identified as being depressed.
- u A depression protocol may increase early identification of depressed patients.



## **Review of Literature**

- u Depressive disorders affect over 300 million people worldwide, which is 4.4% of the world's population. (Engel et al., 2018).
- u Implementing cost-effective interventions to reduce its burden has become a global focus (Engel et al., 2018).
- u Early recognition and treatment of mental health disorders can help prevent complications and help reduce health care costs.





## **Review of Literature - Continued**

- u Early recognition/treatment of depression is crucial, as duration of untreated depression correlates with worse outcomes (Kraus et al, 2020).
- u Effective care for depression requires ongoing monitoring and management.
- <sup>u</sup> The goal of depression treatment should be remission of symptoms, rather than just improvement.





## **Purpose and Project Question**

- u The proposed protocol's purpose is to improve early recognition and management of depression in the primary care setting to positively impact suicide rates.
- u Will primary care providers improve early recognition and management of depression with the use of a depression management protocol (DMP) compared to current practice without a protocol in four weeks?





#### **Project Plan/Objectives**

- 1. Create a standardized DMP for the primary care setting.
- 2. Educate the participants in the use of the depression protocol.
- 3. Improve providers' attitudes and skills in identifying and managing depression.
- 4. Monitor staff compliance with the DMP, which can be measured through a

retrospective chart audit.



# **Project Design**

- u A depression pre-test was administered before a depression training session during week one.
- u A post-test was administered on the same day following the educational session.
- u The DMP was implemented after the staff received training.
- u Chart audits were completed for provider compliance.



# Results

Average Depression Management Score Among Clinic Staff Note.

*Note.* On average, staff attitudes/perceived skills towards depression and towards the management of depression improved significantly pre to post intervention by 27.4 points (85% CI 23.5, 31.3),  $t_{(df=9)}$ , p<.001, (N=10).





## **Results- Continued**

Provider Compliance with the Depression Management Protocol

#### Compliance

	N (%)	%
Overall	75 (100.0%)	89.3%

Note. Overall, provider compliance with the depression management protocol was significant at 89.3% (N=75).



# **Discussion of Findings**

- u The DMP improved the attitudes/perceived skills of clinic staff regarding depression and depression management.
- <sup>u</sup> The participant scores increased from 34.4% to 61.7% (post depression educational session).
- u After implementation of the DMP, patients who were positive for the PHQ-9 were treated and/or referred to a mental health specialist.





# **Discussion of Findings- Continued**

- u The chart audit revealed an overall result of 89.3%. Eight of the 75 audited patient charts were missing the depression screening as the provider(s) simply forgot to complete it.
- <sup>u</sup> One limitation was that the project lead contracted COVID-19, which meant that the lead was not available at the clinic site.
- u The high compliance rate suggests improved identification and management of depression at the clinic.
- u Improvement in the identification and management of depression will help decrease suicide rates.





## **Discussion of Implementation/Evaluation**

- u The QI project addressed two major areas: improvement of depression management and improvement in providers' attitudes and skills regarding depression.
- u The outcome data was analyzed using the SPSS version 23 for data analysis.
- u Pre and post test results was measured and compared utilizing a paired samples t-test.
- u A simple percentage of compliance with a 95% CI was utilized to measure the frequency of provider compliance with the DMP.



### **Theoretical Model**

- u The Plan-Do-Study-Act (PDSA) methodology is a four-step process.
- u This QI project is based on scientific methods.
- <sup>u</sup> The key to its successful use is to ensure each cycle has a well stated prediction or plan.





# **Significance/Implications for Nursing**

- u Providers in the primary care setting play a critical role in preventing suicide.
- u The use of a depression protocol has proved to be an essential component in numerous trials.
- u Implementation of the DMP at the primary care clinic created a positive change in the clinic workflow.





# **Significance for Nursing- Continued**

- u Nurses have become leaders in translating reliable evidence from current literature into practice in order to improve patient outcomes.
- u This project demonstrates how a nurse-led intervention can positively impact depression management by educating providers and implementing a protocol.







# Limitations

- u One significant limitation for this project was related to COVID-19.
- u The project lead contracted the COVID-19 infection and was forced to quarantine.
- u Selection bias occurred as there was no randomization for the pre and post tests.



## **Ideas for Future Dissemination**

- u The final QI project will be filed with the Doctoral Project Repository.
- u An abstract will be submitted for publication consideration to the *American Journal* of Nursing (AJN).
- u The project lead will disseminate the project findings to the project site stakeholders.
- <sup>u</sup> The project lead will share the QI project with students and instructors in the Doctor of Nursing Practice program at Touro University, Nevada.





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